

IN THE CLAIMS:

All claim cancellations and amendments are made without prejudice or disclaimer.

Please amend the claims by canceling claims 1-60 after entering new claims 61-100, as follows:

1- 60. (Canceled)

61. (New) A method for detecting a selected drug in a biological sample comprising individual specific antibodies and identifying a source of the biological sample, the method comprising:

- immobilizing multiple antigens in a pre-selected pattern on a solid support;
- immobilizing a detectable amount of a selected drug on the solid support, to form an array;
- providing an antibody-enzyme conjugate comprising an antibody configured to bind the selected drug and an enzyme that is capable of converting a colorigenic substrate into a colored product;
- contacting the array with a biological sample, to bind at least some of the multiple antigens with individual specific antibodies in the biological sample, to form immune complexes;
- contacting the array with the antibody-enzyme conjugate, wherein the antibody-enzyme conjugate competitively binds to (i) the selected drug immobilized on the array, to form an immobilized antibody-enzyme conjugate, and (ii) any selected drug that may be present in the biological sample, to form a soluble drug-antibody-enzyme conjugate;
- washing the solid support, to remove at least the soluble drug-antibody-enzyme complexes;
- contacting the solid support with a colorigenic substrate to convert the colorigenic substrate to a colored product using the immobilized antibody-enzyme conjugate;
- determining an amount of the colored product present, wherein the amount of the colored product may be inversely correlated with an amount of the selected drug in the biological sample;
- and
- detecting the immune complexes immobilized on the solid support to form an antibody profile characteristic of the source of the biological sample.

62. (New) The method of claim 61, further comprising comparing the antibody profile to one or more candidate antibody profiles from candidate sources, wherein a match of the antibody profile to the one or more candidate antibody profiles identifies the source of the biological sample.
63. (New) The method of claim 61, wherein immobilizing a detectable amount of the selected drug on the solid support comprises selecting the selected drug from the group consisting of marijuana, cocaine, methamphetamine, amphetamine, heroin, methyltestosterone, mesterolone and combinations thereof.
64. (New) The method of claim 61, wherein contacting the array with a biological sample comprises obtaining a biological sample from a source selected from the group consisting of tissue, blood, saliva, urine, perspiration, tears, semen, serum, plasma, amniotic fluid, pleural fluid, cerebrospinal fluid, and combinations thereof.
65. (New) The method of claim 61, comprising obtaining the biological sample from saliva.
66. (New) The method of claim 61, comprising immobilizing multiple antigens from a HeLa cell.
67. (New) The method of claim 61, comprising immobilizing multiple antigens from a random peptide library.
68. (New) The method of claim 61, comprising immobilizing multiple antigens from an epitope library.
69. (New) The method of claim 61, comprising immobilizing multiple antigens from a random cDNA expression library.

70. (New) The method of claim 61, comprising immobilizing multiple antigens on the solid support, wherein the solid support comprises at least one substance selected from the group of substances consisting of glass, silicon, silica, polymeric material, poly(tetrafluoroethylene), poly(vinylidenedifluoride), polystyrene, polycarbonate, polymethacrylatem, ceramic material, and hydrophilic inorganic material.
71. (New) The method of claim 61, comprising immobilizing multiple antigens on the solid support, wherein the solid support comprises a hydrophilic inorganic material selected from the group consisting of at least one of alumina, zirconia, titania, nickel oxide.
72. (New) The method of claim 61, wherein providing the antibody-enzyme conjugate comprises the antibody conjugated to alkaline phosphatase.
73. (New) The method of claim 61, wherein providing the antibody-enzyme conjugate comprises providing the antibody conjugated to horseradish peroxidase.
74. (New) The method of claim 61, wherein detecting the immune complexes immobilized on the solid support comprises:
- contacting the immune complexes with primary antibodies capable of binding the immune complex, wherein the primary antibodies are from a different species than the individual specific antibodies;
- removing primary antibodies not bound to the immune complexes;
- contacting the primary antibodies bound to the immune complexes with enzyme-conjugated secondary antibodies capable of binding the primary antibodies, wherein the enzyme-conjugated secondary antibodies are from a different species than the individual specific antibodies and the primary antibodies;
- removing unbound enzyme-conjugated secondary antibodies; and
- detecting bound enzyme-conjugated secondary antibodies, to detect the immune complexes on the solid support.

75. (New) A method for analyzing biological material comprising individual-specific antibodies, the method comprising:
forming an array comprising multiple antigens attached to a surface of a solid support in a preselected pattern such that locations of the multiple antigens are known;
obtaining a sample of a biological material having individual-specific antibodies and contacting the array with the sample to bind at least a portion of the individual-specific antibodies to the multiple antigens of the array, to form immune complexes;
washing the array containing the immune complexes;
detecting the immune complexes; and
identifying the immune complexes on the array, to obtain an antibody profile.
76. (New) The method of claim 75, wherein forming an array comprises attaching the multiple antigens to the solid support through a covalent bond.
77. (New) The method of claim 75, comprising obtaining a sample of a biological material selected from the group of biological material consisting of tissue, blood, saliva, urine, perspiration, tears, semen, serum, plasma, amniotic fluid, pleural fluid, cerebrospinal fluid, and combinations thereof.
78. (New) The method of claim 75, wherein forming the array comprises attaching multiple antigens to a solid support composed of glass or silica.
79. (New) The method of claim 75, wherein detecting the immune complexes comprises treating the array such that the presence of immune complexes at a location is characterized by a color change at the location.

80. (New) The method of claim 79, wherein detecting the immune complexes comprises obtaining an output using a charge-coupled device and wherein the color change comprises fluorescence or luminescence emission.
81. (New) The method of claim 75, wherein detecting the immune complexes further comprises monitoring the array with solid state color detection circuitry and comparing color patterns before and after detecting the immune complexes.
82. (New) The method of claim 75, wherein detecting the immune complexes further comprises obtaining a color camera image before contacting the array with the sample and after detecting the immune complexes, and analyzing pixel information obtained therefrom.
83. (New) The method of claim 75, wherein detecting the immune complexes further comprises scanning the array before and after contacting the array with the sample, wherein the solid support is a surface plasmon resonance chip.
84. (New) The method of claim 75, wherein forming the array comprises attaching a first subset of antigens configured for obtaining an antibody profile and a second subset of at least one antigen configured for assaying for a selected analyte in the sample.
85. (New) The method of claim 84, wherein attaching the second subset of at least one antigen comprises attaching at least one drug.
86. (New) The method of claim 85, wherein attaching at least one drug comprises attaching a drug selected from the group consisting of marijuana, cocaine, methamphetamine, amphetamine, heroin, methyltestosterone, mesterolone and combinations thereof.

87. (New) The method of claim 76, wherein obtaining a sample of a biological material comprises obtaining the biological material from a forensic sample.
88. (New) The method of claim 87, further comprising comparing the antibody profile obtained from the biological material from the forensic sample to an antibody profile prepared from a biological sample obtained from a suspect.
89. (New) An array for detecting a selected drug in a biological sample comprising:
a solid support bearing array comprising:
multiple antigens attached to the solid support in a known arrangement on the solid support; and
a detectable amount of at least one drug attached to the solid support, to form an array.
90. (New) The array of claim 89, wherein the multiple antigens are from a source selected from the group consisting of a human, dog, horse, and cow.
91. (New) The array of claim 89, wherein the drug is selected from the group consisting of marijuana, cocaine, methamphetamine, amphetamine, heroin, methyltestosterone, mesterolone and combinations thereof.
92. (New) The array of claim 89, wherein the multiple antigens are from a human.
93. (New) The array of claim 92, wherein the drug is selected from the group consisting of marijuana, cocaine, methamphetamine, amphetamine, heroin, methyltestosterone, mesterolone and combinations thereof.
94. (New) The array of claim 89, wherein the multiple antigens comprise antigens from a HeLa cell.

95. (New) The array of claim 89, wherein the multiple antigens comprise antigens from a random peptide library.
96. (New) The array of claim 89, wherein the multiple antigens comprise antigens from an epitope library.
97. (New) The array of claim 89, wherein the multiple antigens comprise antigens from a random cDNA expression library.
98. (New) The array of claim 89, wherein the solid support is selected from the group of substances consisting of glass, silicon, silica, polymeric material, poly(tetrafluoroethylene), poly(vinylidenedifluoride), polystyrene, polycarbonate, polymethacrylatem, ceramic material, and hydrophilic inorganic material.
99. (New) The array of claim 98, wherein the solid support comprises a hydrophilic inorganic material selected from the group consisting of alumina, zirconia, titania, nickel oxide.
100. (New) The array of claim 89, wherein the solid support is a surface plasmon resonance chip.